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TEST REPORT

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WYLE JOB NO.: T58348
CLIENT P.O. NO.: 5995
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REVISON A: August 17, 2011

TEST AND EVALUATION OF THE AQUA CREEK PRODUCTS' MODEL F-008SC POOL LIFT

for

Aqua Creek Products
9889 Garry More Lane
Missoula, MT 59808

STATE OF ALABAMA
COUNTY OF MADISON }

Robert D. Hardy, Department Manager, being duly sworn, deposes and says: The information contained in this report is the result of complete and carefully conducted testing and is to the best of his knowledge true and correct in all respects.

Robert Hardy

SUBSCRIBED and sworn to before me this 29 day of Mar 20 11

Sandra A. Vanel
Notary Public in and for the State of Alabama at Large

My Commission expires June 5, 201

Wyle shall have no liability for damages of any kind to person or property, including special or consequential damages, resulting from Wyle's providing the services covered by this report.

PREPARED BY: Jimmy Smith 3-25-11
Jimmy Smith, Senior Engineering Specialist Date

APPROVED BY: Brian Coppock 3/29/11
Brian Coppock, Senior Test Supervisor Date

WYLE Q. A.: Brenda Mase 3/29/11
for Raul F. Terceno, Q. A. Manager Date

REVISION A

REVISIONS

REVISION A
REPORT NO. T58348
DATE August 17, 2011

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REV	DATE	PAGE OR PARAGRAPH AFFECTED	BY	APP'L	DESCRIPTION OF CHANGES
A	8/17/11	Page No. 2 of 3 Section 2.1 Details of Tested System	JWS 8-17-11	8/17/11 ~~TDA~~ 8/17/11 8/18/11	Revised Table 2-1 Components List.

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1.0 INTRODUCTION

1.1 Scope

This report documents conformance of the Aqua Creek Products Model F-800SC Scout Pool Lift with the applicable sections of the American with Disabilities Act: 1990 (Amendments Act Of 2008): Accessibility Guidelines 1009.2, ANSI/AAMI ES60601-1:2005, "Medical Electrical Equipment – Part 1: General Requirements for Basic Safety and Essential Performance," and Clause 27 of the "Standard for Polymeric Materials" UL 746C. Testing and evaluation of the Scout Pool Lift were conducted at Aqua Creek Products facility in Missoula, MT. The testing and evaluation were authorized by Mr. Brian Goettlich of Aqua Creek Products and conducted on March 9, 2010.

Contact: Mr. Brian Goettlich
Telephone: (888) 687-3552
E-mail: bgoettlich@aquacreek.com

1.2 Product Description

The Scout Pool Lift is a 24-VDC battery-powered; self-operable, permanently-mounted pool lift designed to assist physically challenged individuals with access to swimming pools and/or spas. A detailed description of the Scout Pool Lift, hereinafter referred to as the EUT, and its support equipment is provided in Section 2.1.

1.3 References

- Aqua Creek Products Purchase Order Number 5995
- Wyle Laboratories' Quotation No. HSV 545/052707/NB
- American with Disabilities Act: 1990 (Amendments Act Of 2008): Accessibility Guidelines 1009.2
- ANSI/AAMI ES60601-1:2005, "Medical Electrical Equipment – Part 1: General Requirements for Basic Safety and Essential Performance" (IEC 60601-1:2005)
- UL 746C "Standard for Polymeric Materials"
- Wyle Laboratories' Quality Assurance Program Manual, Revision 3
- Wyle Laboratories' Quality Assurance Program, Revision 4
- ANSI/NCSL Z540-1, "Calibration Laboratories and Measuring and Test Equipment, General Requirements"
- ISO 10012-1, "Quality Assurance Requirements for Measuring Equipment"

1.4 Compliance Summary

The Aqua Creek Products Model F-800SC Pool Lift complied with the applicable sections on ANSI/AAMI ES60601-1:2005 and ADA Guidelines 1009.2 as indicated in Table 1-1, with no modifications necessary. This evaluation report is valid only for the Scout Pool Lift. Any safety changes, revisions, or corrections made to the model after this evaluation shall be reevaluated, and a revised report shall be issued.

Table 1-1 Compliance Summary

Test Description	Applicable Sections of ANSI/AAMI ES60601-1	Compliant/Non-Compliant
General Tests	Section 4	Compliant
Accessible Parts	Section 5.9	Compliant
Equipment Identification	Section 7	Compliant
Protection Against Mechanical Hazards	Section 8	Compliant
Test Description	**Applicable Sections of the ADA Accessibility Guidelines**	**Compliant/Non-Compliant**
ADA Requirements	1009.2	Compliant

2.0 SYSTEM TEST CONFIGURATION

2.1 Details of Tested System

The EUT and associated components of the test system are identified as Table 2-1.

Table 2-1 Components List

Item	Part/Model No.	Quantity
Scout Pool Lift	Model F-800SC	1
Battery/Control Combination & Charger	CBJ (Combo Unit) & CH (Charger)	1 each
Battery(1)	BAJ	1
Control Box(1)	CBJ	1
Linak Actuator(2)	LA	1
Derock Actuator(2)	YLSDTZ01	1
Handset (Pendant Control)	HB	1

Notes: 1) Optional battery components for use on the Scout Model.

2) Actuators may be interchanged on the Scout Model.

2.2 Electrical Ratings

- Battery Charger: Input: 120 VAC, 60 Hz, 14 VA, Output: 26 VDC @ 220 ma
- Battery 24 VDC, 6.5A

2.3 Construction Details

The Scout Pool Lift frame is constructed of stainless steel coated with a UV resistant powder coat finish. For specific construction details see Attachments G and H. Approximate weight and measurements are as follows:

- Weight: Approximately 135 lbs.
- Approximate Dimensions (Retracted Mode): 87" (214 cm) height x 68" (172.5 cm) deep x 25" (63.5 cm) wide

2.4 Quality Assurance

All work performed on this program was in accordance with Wyle Laboratories' Quality Assurance Program and Wyle Laboratories' Quality Program Manual, which conforms to the applicable portions of International Standard Organization (ISO) Guide 17025. The Wyle Laboratories, Huntsville Facility, Quality Management System is registered in compliance with the ISO-9001 International Quality Standard. Registration has been completed by Quality Management Institute (QMI), a Division of Canadian Standards Association (CSA).

2.5 Test Equipment and Instrumentation

All instrumentation, measuring, and test equipment used in the performance of this test program was calibrated in accordance with Wyle Laboratories' Quality Assurance Program which complies with the requirements of ANSI/NCSL Z540-1, ISO 10012-1, and ISO/IEC 17025. Standards used in performing all calibrations are traceable to the National Institute of Standards and Technology (NIST) by report number and date. When no national standards exist, the standards are traceable to international standards or the basis for calibration is otherwise documented.

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ATTACHMENT B
SAFETY CRITICAL COMPONENTS

DATA SHEET

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Customer: Aqua Creek
Specimen: Scout Pool Lift

Part No.	F-800SC	Amb. Temp.	N/A	Job. No.	T58348
Spec.	ANSI-AAMI ES60601-1	Photo	N/A	Report No.	T58348-01
Para.	Various	Test Med.	N/A	Start Date	9 March 2011
S/N	N/A	Specimen Temp.	See Table		

Test Title: Critical Safety Components

Device	MFG	Model	Technical Data, Rating	Marks of Conformity
Control Box & Battery Combination	Linak	CBJH	Input: 24 VDC Output: 24VDC, 250 W maximum	UL Recognized File E175209, CE, CSA, N576
Battery Charger for Combo Unit	Linak	CH	Input: 120 VAC, 60 Hz, 14 VA maximum, Output: 26 VDC, maximum 200mA	UL Listed, CE & CSA
Control Box (optional)	Linak	CBJ	Input: 24 VDC Output: 24VDC, 250 W maximum	UL Recognized File E175209, CE, CSA, N576
Battery (optional)	Linak	BAJ	Output: 24 VDC, 10A maximum	UL Recognized File E175209, CE, CSA, N576
Battery Charger (optional)	Linak	CHJ	Input: 100-240 VAC, 50.60 Hz, 400 mA maximum, Output: 29.5 VDC, maximum 12 VA, Fuse: T 1.25A, 250V	UL Recognized File E175209, CE, CSA, N576
Actuator	Linak	LA34	24 VDC, 4.5A maximum	UL Recognized File E175209 CE, CSA, N576
Handset (Pendant Control)	Linak	HB00-U010	Four (4) Position Touch Control	UL Recognized File E175209,

Tested By [signature] Date MAR 9, 2011
Witness N/A Date NA
Sheet No. 1 of 1

Notice of Anomaly N/A

Approved [signature] 3/22/11

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ATTACHMENT C
DATA SHEETS

DATA SHEET

wyle laboratories

Customer: Aqua Creek
Specimen: Scout Pool Lift

Part No.	F-800SC	Amb. Temp.	N/A	Job. No.	T58348
Spec.	ANSI-AAMI ES60601-1	Photo	N/A	Report No.	T58348-01
Para.	4	Test Med.	N/A	Start Date	9 March 2011
S/N	N/A	Specimen Temp.	See Table		

Test Title: General Tests

The following sections were evaluated by either actual visual inspection of the EUT and/or inspection of accompanying documentation:

1 Paragraph 4.7 Single Fault Condition

- Paragraph 4.7 is not applicable because the EUT is powered by an internal 24 VDC battery pack and is not susceptible to a single fault risk. The EUT battery charger connects to the AC mains and has been tested and listed by UL but is not directly connected to the EUT.

2. Paragraph 4.10 Power Supply

- The EUT is powered by an *Internal Electrical Power Source* and meets the requirements of this paragraph.

3. Paragraph 4.11 Power Input

- Paragraph 4.11 is not applicable because the EUT does not connect direct to the AC mains. The EUT is powered by an internal 24 VDC battery pack which has been tested and listed by UL (File Number E175209).

Tested By Jay Mantz Date Mar 9, 2011
Witness N/A Date NA
Sheet No. 1 of 1

Notice of Anomaly None

Approved Robert Hamm 3/22/11

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DATA SHEET

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Customer: Aqua Creek
Specimen: Scout Pool Lift

Part No.	F-800SC	Amb. Temp.	N/A	Job. No.	T58348
Spec.	ANSI-AAMI ES60601-1	Photo	N/A	Report No.	T58348-01
Para.	5.7	Test Med.	N/A	Start Date	9 March 2011
S/N	N/A	Specimen Temp.	See Table		

Test Title: Humidity Preconditioning

Humidity Preconditioning is not applicable. Test requirements of Paragraphs 8.7.4 and 8.8.3 are not applicable because the EUT does not connect directly to the AC mains.

The EUT battery charger connects to the AC mains and is UL listed but not directly connected to the EUT.

Tested By [signature] Date MAR 9, 2011
Witness N/A Date NA
Sheet No. 1 of 1

Notice of Anomaly None

Approved [signature] 3/22/11

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DATA SHEET

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Customer: Aqua Creek
Specimen: Scout Pool Lift

Part No.	F-800SC	Amb. Temp.	N/A	Job. No.	T58348
Spec.	ANSI-AAMI ES60601-1	Photo	N/A	Report No.	T58348-01
Para.	7	Test Med.	N/A	Start Date	9 March 2011
S/N	N/A	Specimen Temp.	See Table		

Test Title: Equipment Identification, Markings and Documents

1. Paragraph 7.1.2 Legibility of Markings
   - All warning statements, instructive statements and safety markings and drawings display on the exterior of the Equipment Under Test (EUT) are legible and readable from the intended position of the operator.
2. Paragraph 7.2.4 Accessories
   - All accessories are clearly marked with the manufacturers name and trademark and applicable electrical ratings.
3. Paragraph 7.9.2 Instructions
   - An Operators Instruction Manual is included with the EUT detailing set-up and operational functions as well as safety warnings.

Tested By Jon Smith Date Mar 9, 2011
Witness N/A Date N/A
Sheet No. 1 of 1

Notice of Anomaly None

Approved Robert Hamm 3/22/11

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DATA SHEET

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Customer: Aqua Creek
Specimen: Scout Pool Lift

Part No.	F-800SC	Amb. Temp.	N/A	Job. No.	T58348
Spec.	ANSI-AAMI ES60601-1	Photo	N/A	Report No.	T58348-01
Para.	8.8.3	Test Med.	N/A	Start Date	9 March 2011
S/N	N/A	Specimen Temp.	See Table		

Test Title: Dielectric Strength

This test was waived because the battery charger is the only accessory that is connected to the AC mains and has been tested and listed by UL. The charger is not directly connected to the EUT.

Tested By Jim Smith Date MAR 9, 2011
Witness N/A Date NA
Sheet No. 1 of 1

Notice of Anomaly None

Approved Robert Hanes 3/22/11

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DATA SHEET

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Customer: Aqua Creek
Specimen: Scout Pool Lift

Part No.	F-800SC	Amb. Temp.	N/A	Job. No.	T58348
Spec.	ANSI-AAMI ES60601-1	Photo	N/A	Report No.	T58348-01
Para.	9	Test Med.	N/A	Start Date	9 March 2011
S/N	N/A	Specimen Temp.	See Table		

Test Title: Protection Against Mechanical Hazards

The following sections were inspected to determine compliance with any mechanical hazards:

Mechanical Hazard	Section 9, Sub-clause	Compliant/Non-compliant
Hazards Associated with Moving Parts	9.2	Compliant
Hazards Associated with Surfaces, Corners, and Edges	9.3	Compliant
Instability Hazards	9.4	Compliant
Expelled Parts Hazard	9.5	Compliant

Tested By Jay Smith Date MAR 9 2011
Witness N/A Date NA
Sheet No. 1 of 1

Notice of Anomaly None

Approved Robert Hamm 3/22/11

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DATA SHEET

wyle laboratories

Customer: Aqua Creek
Specimen: Scout Pool Lift

Part No.	F-800SC	Amb. Temp.	N/A	Job. No.	T58348
Spec.	ANSI-AAMI ES60601-1	Photo	N/A	Report No.	T58348-01
Para.	11.1.1 (Table 24)	Test Med.	N/A	Start Date	9 March 2011
S/N	N/A	Specimen Temp.	See Table		

Test Title: Maximum Temperature During Normal Use

The actuator of the EUT was operated continuously for ten (10) minutes) and maximum temperatures were recorded as indicated in the following table: Ambient Temperature = 23° C

Test Location	Measured Temperature (C°)	Maximum Allowable Temperature (C°)
Actuator Housing	30.2	48
Battery/Control Box	24.2	48
Actuator Drive Shaft Housing	25.3	48
Seat	23.0	43
Arm Rest	23.0	43

Tested By: Jim Smith — Date: MAR 9 2011
Witness: N/A — Date: NA
Sheet No.: 1 — of: 1

Notice of Anomaly: None

Approved: Robert Hauf 3/22/11

Wyle Form WH614A, Rev. APR '84

DATA SHEET

wyle laboratories

Customer: Aqua Creek
Specimen: Pool Lift

Part Number	F-800SC	Amb. Temp.	N/A	Job. No.	T58348
Specification	ADA 1990 (2008) Guidelines Section 1009.2	Photo	Y	Report No.	T58348-01
Para.	Various (see table below)	Test Med.	N/A	Start Date	March 9, 2011
S/N	N/A	Specimen Temp.	N/A		

Test Title: Compliance with Applicable Sections of the American with Disabilities Act Guidelines for Pool Lifts Section 1009.2)

ADA Guidelines for Pool Lifts Section & Description	Requirement	Compliance		Comments
		Yes	No	
1009.2.2 Seat Location	In the raised position, the centerline of the seat shall be located over the deck and 16 inches (405 mm) minimum from the edge of the pool. The deck surface between the centerline of the seat and the pool edge shall have a slope not steeper than 1:48.	X		Instructions for installation of the lift in accordance with ADA Guidelines are included in the Aqua Creek Products® "*Installation, Assembly and Operating Instructions*" dated December, 2010
1009.2.3 Clear Deck Space	On the side of the seat opposite the water, a clear deck space shall be provided parallel with the seat. The space shall be 36 inches (915 mm) wide minimum and shall extend forward 48 inches (1220 mm) minimum from a line located 12 inches (305 mm) behind the rear edge of the seat. The clear deck space shall have a slope not steeper than 1:48.	X		Instructions for installation of lift incompliance with ADA Guidelines are included in the Aqua Creek Products® "*Installation, Assembly and Operating Instructions*" dated December, 2010
1009.2.4 Seat Height	The height of the lift seat shall be designed to allow a stop at 16 inches (405 mm) minimum to 19 inches (485 mm) maximum measured from the deck to the top of the seat surface when in the raised (load) position.	X		The Seat Height was verified to be compliant with the requirements of the ADA Guidelines.
1009.2.5 Seat Width	The seat shall be 16 inches (405 mm) wide minimum.	X		The Seat Width was verified to be compliant with the requirements of the ADA Guidelines.

Sheet No. 1 of 2

DATA SHEET (continued)

ADA Guidelines for Pool Lifts Section & Description	Requirement	Compliance		Comments
		Yes	No	
1009.2.6 Footrests and Armrests	Footrests shall be provided and shall move with the seat. If provided, the armrest positioned opposite the water shall be removable or shall fold clear of the seat when the seat is in the raised (load) position.	X		Removable footrests are provided on the lift. Armrests are provided and can be folded clear for access and egress on either side of the seat.
1009.2.6 Footrests and Armrests	Footrests shall be provided and shall move with the seat. If provided, the armrest positioned opposite the water shall be removable or shall fold clear of the seat when the seat is in the raised (load) position.	X		Removable footrests are provided on the lift. Armrests are provided and can be folded clear for access and egress on either side of the seat.
1009.2.7 Operation	The lift shall be capable of unassisted operation from both the deck and water levels. Controls and operating mechanisms shall be unobstructed when the lift is in use.	X		The Handset Control allows the user to adjust the lift on a vertical and/or horizontal plane without obstructions.
1009.2.8 Submerged Depth	The lift shall be designed so that the seat will submerge to a water depth of 18 inches (455 mm) minimum below the stationary water level.	X		The seat was verified to exceed the requirement of 18 inches below water depth.
1009.2.9 Lifting Capacity	Single person pool lifts shall have a weight capacity of 300 pounds. (136 kg) minimum and be capable of sustaining a static load of at least one and a half times the rated load.	X		The Load Capacity of the lift was verified up to 350 pounds and Static Load Capacity was verified up to 525 pounds.

Tested By Jim Smith Date 3-9-11
Witness NA Date NA
Sheet No. 2 of 2

Notice of Anomaly None

Approved 3/21/11

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